

A new species of *Eriocaulon* L. (Eriocaulaceae) from Maharashtra, India

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Abstract

Eriocaulon kolhapurense, a new species belonging to the family Eriocaulaceae is described and illustrated.

INTRODUCTION

During our intensive field survey of Eriocaulaceae of Maharashtra, over 40 species of *Eriocaulon* L. have been collected and reported for the state (Gaikwad & Yadav, 2002), of which two species turned out to be new. One from Ratnagiri region has already been described as a new species viz., *Eriocaulon ratnagiricus* Yadav *et al.* (Yadav *et al.*, 1998) while the other species from Western Ghat region is described and illustrated here as another new species.

Eriocaulon kolhapurense Gaikwad, Sardesai *et* Yadav, *sp. nov.* (Fig. 1).

Type: India, Maharashtra: Kolhapur, alt. ca. 800 m, 30 Oct. 1998, Sardesai 5350 (holo-CAL; iso-BSI, K, BLAT, CALI, SUK).

E. parviflorum affinis, sed bracteae flori imbricatis, cuculo-similibus; duo sepalis conduplicatis, saccatis, manifeste carinatis et in structura petalorum florum marium et femineorum differt.

Erect, acaulescent herbs, up to 5 cm tall. Leaves lanceolate, acuminate, glabrous, ca. 2.5 cm long. Peduncles few, ca. 4.5 cm in height, bluntly angled, glabrous. Sheaths ca. 1 cm long; limb lanceolate, acute, entire. Head globose, dentate, grey, ca. 3 mm across. Receptacle globose-cylindrical, pilose. Involucral bracts erect or spreading, ca. 2.1 x 1.3 mm, oblong, obovate, obtuse, entire, hyaline, glabrous. Floral bracts ca. 1.4 x 1.3 mm, closely imbricated, hood-like, obovate, acute, dorsally densely hairy towards apex, grey. Male flowers: pedicels minute, hairy. Sepals 3, united into spathe, 3-lobed, ca. 1.8 x 1.4 mm; lobes obtuse, hairy at apex, grey. Petals 3, unequal; larger one up to 1.4 mm long, linear-lanceolate, with prominent black gland; remaining two ca. 0.5 mm long, each with a black gland. Anthers 6, globose, black. Female flowers: subsessile, pedicel with long hairs. Sepals 2, free, ca. 2.1 mm long, conduplicate, pouched, strongly keeled, acute, hairy towards apex, grey. Petals 3,

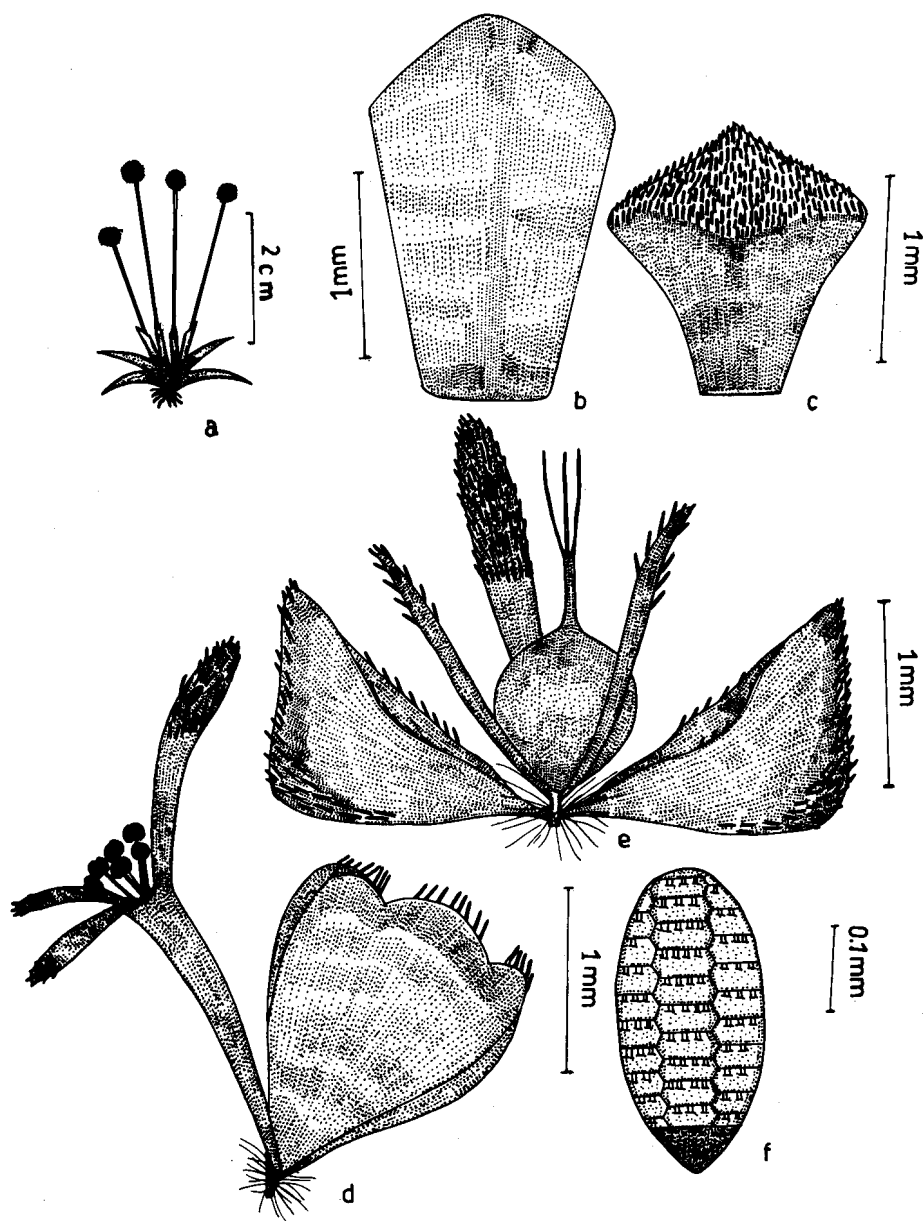
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Fig. 1. *Eriocaulon kolhapurense* Gaikwad, Sardesai *et* Yadav: a. Habit; b. Involucral bract; c. Floral bract; d. Male flower; e. Female flower; f. Seed.

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free, ca. 1.7 mm long, subequal, linear-lanceolate, acute or obtuse, grey, each with a black gland. Ovary globose-ellipsoid; style 3-fid. Seeds oblong-elliptic, ca. 0.31 x 0.15 mm; cells of seed coat transversely elongated, arranged in vertical rows; appendages 2-5 in each cell, setiform, truncate at apex.

Flowering and fruiting: September - October.

Habitat and distribution: *Eriocaulon kolhapurens* is restricted to a small area of 10 sq. km near Rangna fort in Kolhapur district of Maharashtra state. It is rare and sparsely distributed in the region of its occurrence. It grows along marshy margins of temporary streams. It is readily distinguished by its typical globular, grey-coloured heads and lanceolate, acuminate leaves. Its typical associates include *Eriocaulon lanceolatum* Miq. ex Koernicke var. *pilosum* Moldenke, *Eriocaulon eurypeplon* Körn., *Utricularia praeterita* Taylor, *Utricularia naikii* Yadav *et al.* and *Paspalum canarae* (Stud.) Veldk. var. *canarae*.

Note: The new species is allied to *E. parviflorum* (Fyson) Ansari *et* N.P. Balakr. but differs in its closely imbricate hood-like floral bracts; conduplicate, pouched, strongly keeled, two sepals of female flowers and structure of petals of male and female flowers. Comparative morphological characters of the two species are given in the following table.

Eriocaulon kolhapurens	Eriocaulon parviflorum
Plants up to 5 cm in height	Plants 15–20 cm in height.
Floral bracts ca. 1.4 x 1.3 mm, closely imbricate, hood-like, obovate, acute, densely hairy on dorsal surface.	Floral bracts ca. 1.5x0.5 mm, oblanceolate, acuminate or subacute, sparsely hairy towards apex.
Petals of male flowers unequal, middle one large, up to 1.5 mm long, densely hairy towards apex, remaining two sparsely hairy, each with a black gland.	Petals of male flowers 3, minute, subequal, linear, sparsely hairy, each with a black gland.
Sepals of female flowers 2, ca. 2.1 mm long, obovate, conduplicate, pouched, strongly keeled, acute, hairy along keels and margins towards apex, grey.	Sepals of female flowers 3, unequal; the two lateral ones 1-1.5 mm long, oblanceolate, conduplicate, acute or acuminate, minutely keeled, black; middle one distinctly narrower than lateral ones, linear, glabrous.
Petals of female flowers 3, unequal; one large, linear-lanceolate up to 2 mm long, backwardly curved, densely hairy towards apex; remaining two linear spathulate, sparsely hairy towards apex, ca. 1.6 mm long.	Petals of female flowers 3, subequal, spathulate, 0.75-1.25 mm long, obtuse, barbate.

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The specimens were sent to R. Ansari, Govt. Botanical Garden, Kozhikode, Kerala and he assigned the specimens to *E. parviflorum* (Fyson) Ansari & N.P. Balakr. (Personal communication). However, the present species differ from *E. parviflorum* in the structure of floral bracts, and petals and sepals of male and female flowers.

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